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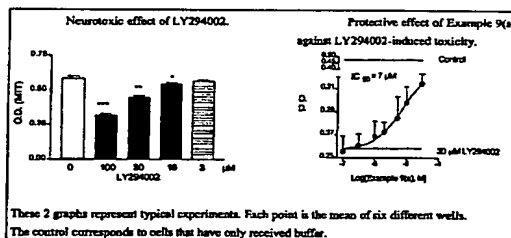
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[Continued on next page]

(54) Title: INDOLIZINES AS KINASE PROTEIN INHIBITORS



(57) Abstract: The present invention concerns compounds of general formula (I): in which: R1 represents hydrogen, R4, -C(=Y)-NHR4, -SO2NHR4, -C(=Z1)-R4, -SO2-R4 or -C(=Z1)-OR4; R2 represents hydrogen, cyano, halogen or -C^oC-R5; R3 represents hydrogen, acyl, alkoxycarbonyl, alkyl, aroyl, aryl, aryloxycarbonyl, carboxy, cycloalkenyl, cycloalkyl, heteroaroyl, heteroaryl, heterocycloalkyl or -C(=O)-NY1Y2; R4 represents optionally substituted alkyl, cycloalkyl, cycloalkenyl, heterocycloalkyl, aryl or heteroaroyl; R5 represents hydrogen or alkyl; R6 represents alkyl, acyl, alkoxycarbonyl, alkylsulfonyl, aryl, arylsulfonyl, aroyl, cycloalkyl, cycloalkenyl, heteroaryl, heteroarylsulfonyl, heteroaroyl and heterocycloalkyl; R7 represents optionally substituted alkyl, cycloalkyl or cycloalkylalkyl, R8 represents hydrogen, alkyl, alkenyl, aryl, arylalkyl, heteroaryl or heteroarylalkyl; R9 represents alkyl, aryl, arylalkyl, cycloalkyl, cycloalkylalkyl, heteroaryl, heteroarylalkyl, heterocycloalkyl or heterocycloalkylalkyl; R10 represents hydrogen or lower alkyl; R11 represents alkyl, aryl, arylalkyl, cycloalkyl, cycloalkylalkyl, heteroaryl, heteroarylalkyl, heterocycloalkyl or heterocycloalkylalkyl; or alkyl optionally substituted by -NY1Y2; R12 represents aryl or heteroaryl; or alkyl, cycloalkyl, cycloalkylalkyl, heterocycloalkyl or heterocycloalkylalkyl each optionally substituted Y represents O, S or NCN; Y1 and Y2 (Y3 and Y4) are independently in particular hydrogen, alkyl, aryl, cycloalkyl, cycloalkenyl, heteroaryl or heterocycloalkyl; or the group -NY1Y2 may form 5-7 membered ring or the group -NY3Y4 (-NY5Y6) may form a cyclic amine; Z (Z1) represents O or S; Z2 represents O or S(O)p; n is zero or an integer 1 or 2; m is 1 or 2; p is 1 or 2; and their corresponding N-oxides, their prodrugs; their pharmaceutically acceptable salts and solvates (e.g. hydrates), also together with one or more pharmaceutically acceptable carriers or excipients, such novel indolizines derivatives with inhibitory effects towards kinase proteins and especially for use for preventing or treating diseases that may be modulated by the inhibition of such kinase proteins and particularly solid tumours.



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INTERNATIONAL SEARCH REPORT

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A. CLASSIFICATION OF SUBJECT MATTER

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According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 C07D A61K

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

CHEM ABS Data

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	IT 1 214 644 B (CONSIGLIO NAZIONALE DELLE RICERCHE A ROMA) 18 January 1990 (1990-01-18) claims 1-21	1-100
A	J. R. ROSS, J. W. SOWELL, SR.: "Synthesis of a Series of Pyrrole-1-acetic Acids as Potential Antiinflammatory Agents" J. HETEROCYCL. CHEM., vol. 24, no. 3, 1987, pages 757-765, XP002225109 * Compounds of formula XXIV*	1-100
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☒ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

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Date of the actual completion of the international search

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INTERNATIONAL SEARCH REPORT

International Application No

PCT/EP 02/11131

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
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INTERNATIONAL SEARCH REPORT

Information on patent family members

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